

Specification Amendments

Please add the following paragraph before the paragraph of entitled “Technical Field”:

“This application claims priority from non-provisional application Serial No. 09/430,078 filed on October 29, 1999, and entitled SIGNAL DERIVED BIAS SUPPLY FOR ELECTROSTATIC LOUDSPEAKERS.”

Please replace the paragraph beginning on page 8, line 1, with the amended paragraph, as follows:

FIG. 3 shows a schematic of a signal derived bias power supply in its most basic operational form. A program signal is received by the primary winding 12 of a transformer 10 and output as a higher voltage from the secondary winding 11 through the tap 51. The signal is rectified by a diode 13a and resistively coupled through a resistor ~~16-15~~ to a speaker diaphragm 30 and returns to the transformer center tap 50 through a voltage limiter 40 or shunt regulator which consists of a capacitor 41 and a zener diode 42. The conventional definition of a center tap is that an approximately equal number of secondary windings are on either side of the tap. It is important to realize that this invention will work with a center tap which does not have an equal number of secondary windings on either side of the center tap. Offsetting the center tap does mean that one side of the circuit produces a higher voltage than the other which is not necessarily desirable, but it is a workable configuration. In addition, the center tap could also be a bias return with another configuration such as a voltage divider or a similar arrangement.

Accordingly, as used in this application, center tap refers to a biasing tap separate from the stator taps 51.

Please replace the paragraph beginning on page 15, line 20, with the amended paragraph, as follows:

FIG. 9 shows a schematic of a self bias supply where the zener diodes are located near the secondary winding taps. Two stators 124 and 126 are powered from the high voltage taps 138 and 140 of the secondary winding. The center tap or bias return 120 is connected to two speaker membranes ~~129~~¹²⁸ and 130 and includes a capacitor 132 to aid in voltage regulation. Two zener diodes 134 and 136 are electrically located near the high voltage bias taps 138 and 140, and limit the voltage from the secondary windings of the transformer. It should be realized that although only two zener diodes are shown, each diode actually represents approximately 10 or more 200 volt diodes which regulate the 2000 - 3000 volt output of the step up transformer 122.